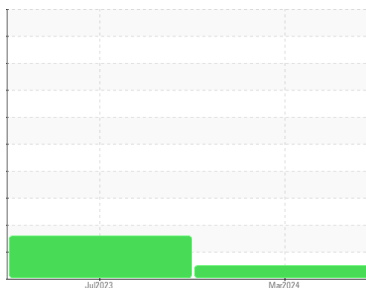




Built for a lifetime.

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

KAESER 7741655

Component

Compressor

Fluid

KAESER SIGMA (OEM) M-460 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KCPA015168	KCPA004489	---
Sample Date	Client Info	25 Mar 2024	12 Jul 2023	---
Machine Age	hrs	Client Info	0	720
Oil Age	hrs	Client Info	202	0
Oil Changed	Client Info	Changed	N/A	---
Sample Status		NORMAL	ABNORMAL	---

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	0	<1	---
Chromium	ppm	ASTM D5185m	>10	<1	0	---
Nickel	ppm	ASTM D5185m	>3	0	0	---
Titanium	ppm	ASTM D5185m	>3	0	0	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>10	0	0	---
Lead	ppm	ASTM D5185m	>10	0	<1	---
Copper	ppm	ASTM D5185m	>50	0	2	---
Tin	ppm	ASTM D5185m	>10	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	0	0	0	---
Barium	ppm	ASTM D5185m	90	49	2	---
Molybdenum	ppm	ASTM D5185m	0	0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m	100	84	51	---
Calcium	ppm	ASTM D5185m	0	2	0	---
Phosphorus	ppm	ASTM D5185m	0	1	<1	---
Zinc	ppm	ASTM D5185m	0	0	6	---
Sulfur	ppm	ASTM D5185m	23500	21853	21697	---

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	0	0	---
Sodium	ppm	ASTM D5185m		11	4	---
Potassium	ppm	ASTM D5185m	>20	0	2	---
Water	%	ASTM D6304	>0.05	0.010	0.015	---
ppm Water	ppm	ASTM D6304	>500	103	154.7	---

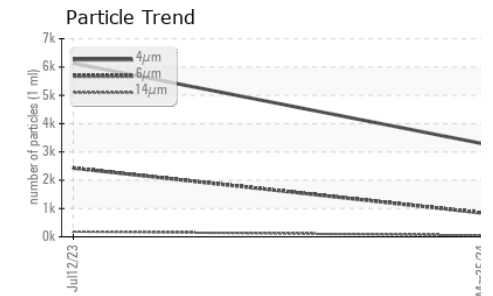
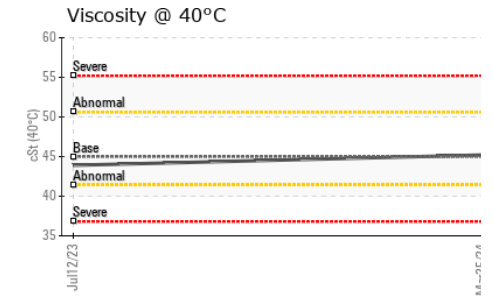
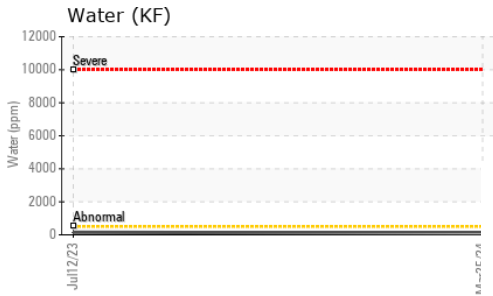
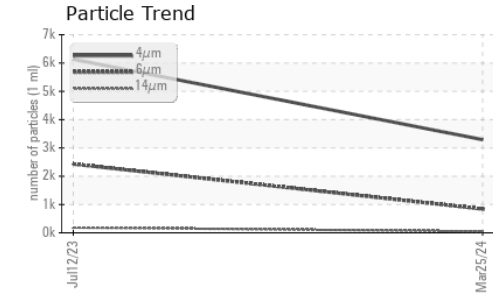
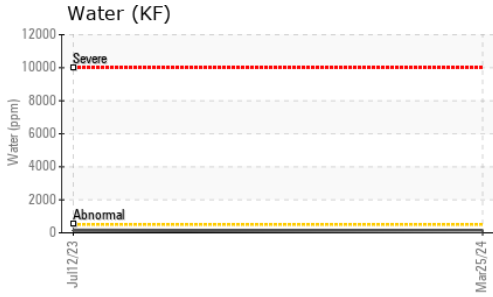
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	3292	6133	---
Particles >6µm	ASTM D7647	842	▲ 2430	---
Particles >14µm	ASTM D7647	48	▲ 185	---
Particles >21µm	ASTM D7647	12	▲ 42	---
Particles >38µm	ASTM D7647	0	2	---
Particles >71µm	ASTM D7647	0	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	19/17/13	▲ 20/18/15

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.36	0.40	---

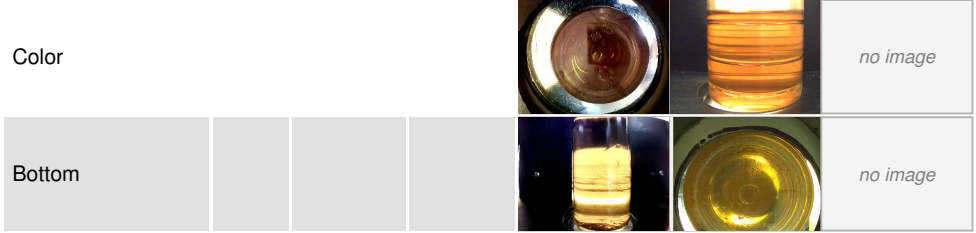
OIL ANALYSIS REPORT



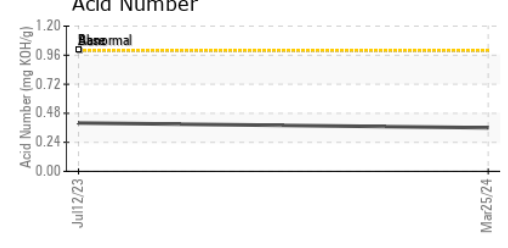
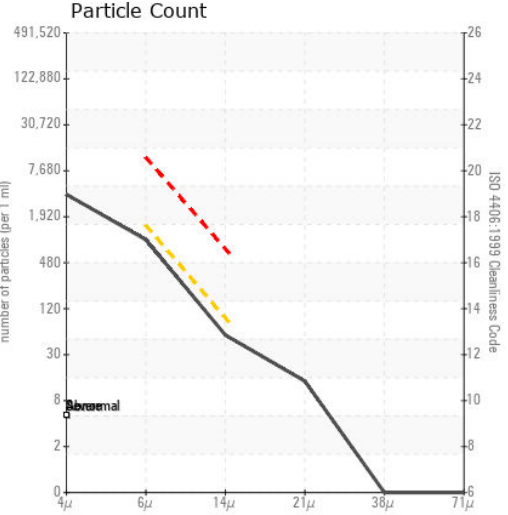
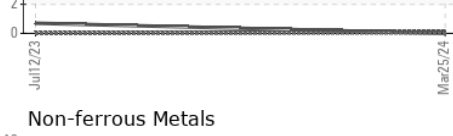
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	45.2	43.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA015168 **Received** : 09 Apr 2024
Lab Number : 06143713 **Tested** : 10 Apr 2024
Unique Number : 10968521 **Diagnosed** : 12 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

OLD DOMINION FREIGHT LINE
 3440 BOYCHUK AVE
 COLORADO SPRINGS, CO
 US 80910
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)